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RUTKOWSKI, JEFFREY M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/766,843

Applicant(s)

DREVN ET AL.

Examiner

JEFFREY M. RUTKOWSKI

Art Unit

2473

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 10-22 and 31-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-19 is/are allowed.
- 6) ☒ Claim(s) 1, 10-16, 20-22 and 31-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/17/2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 2-9 and 23-30 have been cancelled.

Claims 1, 10-22 and 31-36 are pending.

Allowable Subject Matter

1. **Claims 17-19** are allowed.

Drawings

2. Figures 2-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the time adjustment parameter (claim 17), the parameter that represents the number of dedicated channels (claim 19) and the controller and data signaler of the apparatus claims must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1, 10-14, 16 and 35-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alcatel in view of Van Lieshout and Gunnarsson et al. (US Pg Pub 2003/0202490), hereinafter referred to as Gunnarsson.
7. For **claim 1**, Alcatel discloses *sending, from a first network element (SRNC; see figure 5 on page 5) to a second network element (DRNC; see figure 5 on page 5), by means of the radio network layer signaling protocol (RNSAP; see page 1, Section 2, 5th paragraph), at least one parameter representative of transport quality of service or of quality of service for the transport network layer (maximum transfer delay; the maximum transfer delay is included in a RL Setup Request RNSAP message; see page 1 Section 2 5th-6th paragraphs); managing, by the second network element (DRNC), the transport quality of service according to said at least one parameter (maximum transfer delay) for transport quality of service management for uplink transmission (the DRNC uses the maximum transfer delay parameter to manage the QoS of an uplink connection; see page 1, Section 1 and Section 2, 1st and 5th paragraphs).*
8. Alcatel discloses the use of an Iub interface (see page 1 Section 1) and the DRNC manages the QoS for uplink connections (see page 1 Section 2, 1st paragraph). Alcatel does not disclose the location of the Iub interface. Van Lieshout discloses an *Iub interface between a controlling radio network controller (SRNC 14; see figure 1) and a Node B (BS2 20; figure 1* shows the Iub interface exists between the RNC **14 and 18** and the BS **18 and 20**. Van Lieshout further discloses *wherein said radio network layer signaling protocol is a Node B Application Part protocol (the RL Request Message is transmitted using the NBAP protocol; see figure 6) applicable to the Iub interface between the controlling radio network controller (a CRNC could either be a SRNC or a DRNC; see paragraph 0019) and the Node B (the Iub interface is located*

between DRNC and the Node B; see figures 1 and 6). Figures 1 and 6 also show the Iub interface is used in a path that includes the SRNC and a Node B). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Van Lieshout's arrangement in Alcatel's invention to efficiently transport control information (Van Lieshout, paragraph 0002).

9. The combination of Alcatel and Van Lieshout discloses a Node B that receives transport bearer parameters (see figure 6 of Van Lieshout). The combination of Alcatel and Van Lieshout does not disclose a base station that manages the uplink. Gunnarsson discloses *wherein said first network element is a controlling network controller* (RNC 26; see figure 1), *wherein said second network element is a Node B or a base station* (base station 28; see figure 1; the base station 28 is used to perform uplink load control; see paragraph 0050). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a base station to manage uplink transmissions in Alcatel's invention because it is a matter of design choice as to whether or not the base station is used for uplink management (Gunnarsson, 0050).

10. For **claim 10**, Alcatel discloses *wherein said at least one parameter representative of transport quality of service is a specific parameter (maximum transfer delay) intended to indicate a transport quality of service level* (the maximum transfer delay is used to indicate the required QoS level; see page 1, Section 2, 5th paragraph).

11. For **claim 11**, Alcatel discloses *wherein said at least one parameter (maximum transfer delay) representative of transport quality of service is at least one radio access bearer parameter* (the maximum transfer delay is a parameter for an Iub transport bearer; see page 1 Section 1 and Section 2, 5th paragraph).

12. For **claim 12**, Alcatel discloses *wherein said at least one radio access bearer parameter is the transfer delay* (maximum transfer delay; see page 1, Section 2, 6th paragraph).
13. For **claim 13**, Alcatel discloses *wherein said at least one radio access bearer parameter is the traffic handling priority* (the maximum transfer delay is used so that the traffic priority can be mapped; see page 1, Section 2, 3rd paragraph).
14. For **claim 14**, Alcatel discloses *wherein said at least one radio access bearer parameter is the traffic class* (the maximum traffic delay is deduced from the traffic class, see page 1, last paragraph).
15. For **claim 16**, Alcatel discloses *wherein said at least one parameter representative of transport quality of service is at least one parameter associated with a transport quality of service level or at least one radio access bearer parameter* (the maximum transfer delay is a parameter for an Iub transport bearer; see page 1 Section 1 and Section 2, 5th paragraph).
16. For **claim 35**, Alcatel discloses *managing, by the second network element (DRNC), the transport quality of service according to said at least one parameter for transport quality of service management for uplink transmission over an Iur interface* (the DRNC uses the maximum transfer delay parameter to manage the uplink QoS of an Iur interface; see page 1 Section 2, 1st, 3rd and 5th paragraphs).
17. Alcatel does not disclose the location of the Iur interface. Van Lieshout discloses the Iub interface is between *a serving radio network controller and a drift radio network controllers* (see figure 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Van Lieshout's arrangement in Alcatel's invention to efficiently transport control information (Van Lieshout, paragraph 0002).

18. For **claim 36**, Alcatel discloses *managing, by the second network element (DRNC), the transport quality of service according to said at least one parameter for transport quality of service management for downlink transmission over an Iub interface* (the DRNC uses the maximum transfer delay parameter to manage the downlink QoS of an Iub interface; see page 1 Section 2, 1st, 3rd and 5th paragraphs)..

19. Alcatel does not disclose the location of the Iub interface. Van Lieshout discloses the Iub *is between a drift radio network controller and a Node B* (see figure 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Van Lieshout's arrangement in Alcatel's invention to efficiently transport control information (Van Lieshout, paragraph 0002).

20. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Alcatel in view of Van Lieshout and Gunnarsson as applied to **claim 11** above, and further in view of Kim.

21. For **claim 15**, the combination of Alcatel, Gunnarsson and Van Lieshout discloses *wherein said at least one radio access bearer parameter (parameters contained in a RL Setup Request) is copied or translated from the RNSAP protocol to the NBAP protocol* (see figure 6 of Van Lieshout), *or from the RANAP protocol to the RNSAP protocol*. The combination of Alcatel and Van Lieshout does not disclose protocol conversion from the RANAP protocol to the NBAP protocol. Kim discloses *protocol conversion from the RANAP protocol to the NBAP protocol* (a control plane is used that includes the RANAP, RNSAP and NBAP protocols; see paragraphs 0030-0031. Figure 5 shows that control messages are protocol converted from the RANAP protocol to the NBAP protocol as it propagates toward the BS). It would have been obvious to a

person of ordinary skill in the art at the time of the invention to use Kim's arrangement in Alcatel's invention to control the power in the network (Kim, abstract).

22. **Claims 20-22 and 31-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Lieshout in view of Alcatel.

23. For **claim 20**, Van Lieshout discloses *a controller which-controls a Node B* (a CRNC can be either a SRNC or a DRNC; see paragraph 0019). Van Lieshout discloses RL Setup Requests are sent from the SRNC to the Node B (see figure 6). Van Lieshout does not disclose using a RL Setup Request to transmit QoS parameters. Alcatel discloses using RL Setup Request to send *at least one parameter* (maximum transfer delay) *representing the quality of service for the transport network layer* (the maximum transfer delay is included in a RL Setup Request message; see page 1 Section 2 5th-6th paragraphs). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Alcatel's arrangement in Van Lieshout's invention to select the correct QoS for a bearer channel (Alcatel, page 1, Section 1).

24. The combination of Van Lieshout and Alcatel discloses *data signaler which signals to the Node B in accordance with a signalling protocol of a radio network layer corresponding to the NBAP protocol* (figure 6 of Van Lieshout shows the RL Setup Requests are sent to the node B using the NBAP protocol) *applicable to the Iub interface between the radio network controller CRNC and Node B* (the Iub interface is between the Node B and the DNC; see figure 1 of Van Lieshout) *at least one parameter representing the quality of service for the transport network layer* (Alcatel's maximum transfer delay), *for uplink transmission over the Iub interface between the radio network controller CRNC and the Node B* (the maximum transfer delay is used to

determine the QoS for the uplink; Alcatel, page 1 Section 2 1st and 5th paragraphs. The uplink transmissions occur over the Iub interface; see figure 1 of Van Lieshout).

25. For **claim 21**, Van Lieshout discloses RL Setup Requests are sent from the SRNC to the Node B (see figure 6). Van Lieshout does not disclose using a RL Setup Request to transmit QoS parameters. Alcatel discloses using RL Setup Request *wherein said at least one parameter is signaled to the Node B in a Radio Link Setup Request message* (the maximum transfer delay is included in a RL Setup Request message; see page 1 Section 2 5th-6th paragraphs). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Alcatel's arrangement in Van Lieshout's invention to select the correct QoS for a bearer channel (Alcatel, page 1, Section 1)

26. For **claims 22 and 33-34**, Van Lieshout does not disclose the use of specific parameters. Alcatel discloses *wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level* (the maximum transfer delay is used to indicate the required QoS level; see page 1, Section 2, 5th paragraph). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Alcatel's arrangement in Van Lieshout's invention to select the correct QoS for a bearer channel (Alcatel, page 1, Section 1).

27. For **claim 32**, Van Lieshout discloses RL Setup Requests are sent in the network (see figure 6). Van Lieshout does not disclose using a RL Setup Request to transmit QoS parameters. Alcatel discloses using RL Setup Request *wherein said at least one parameter is received in a Radio Link Setup Request message* (the maximum transfer delay is included in a RL Setup Request message; see page 1 Section 2 5th-6th paragraphs). It would have been obvious to a

person of ordinary skill in the art at the time of the invention to use Alcatel's arrangement in Van Lieshout's invention to select the correct QoS for a bearer channel (Alcatel, page 1, Section 1)

28. For **claim 31**, Van Lieshout discloses *a receiver which receives from a radio network controller CRNC* (a SRNC or a DRNC could be a CRNC; see paragraph 0019) *in accordance with a signalling protocol of at radio network layer corresponding to the NBAP protocol applicable to the Iub interface between radio network controller CRNC and Node B* a RL Setup Request message (figure 6 shows the RL Setup Request messages are transmitted from the SRNC and DRNC to the node B via NBAP. Figure 1 shows the Iub interface is between the DRNC and the base station).

29. Van Lieshout discloses the use of RL Setup Request messages (see figure 6). Van Lieshout does not disclose the use of parameters. Alcatel discloses a RL Setup Request message that includes *at least one parameter* (maximum transfer delay; see page 1, Section 2, 6th paragraph). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Alcatel's arrangement in Van Lieshout's invention to select the correct QoS for a bearer channel (Alcatel, page 1, Section 1).

30. The combination of Van Lieshout and Alcatel discloses a RL Request message that contains *at least one parameter representing the quality of service for the transport network layer* (maximum transfer delay) *wherein said at least one parameter relates to managing the transport quality of service for transmission in the uplink direction over the Iub interface between the radio network controller CRNC and Node B* (the maximum transfer delay is used to manage the QoS for the Iub interface in the uplink direction; see Alcatel, page 1, Section 2, 1st

and 5th paragraphs. Figure 1 of Van Lieshout shows the Iub interface is between the DRNC and the base station).

Response to Arguments

31. Applicant's arguments with respect to **claims 1, 10-16 and 35-36** have been considered but are moot in view of the new ground(s) of rejection.

32. The arguments with respect to **claims 20 and 31** are not persuasive because the Applicant is arguing features that are not required by the claims. The Applicant's arguments is based on the combination of Alcatel and Van Lieshout not disclosing the second network element managing uplink transport quality over an Iub interface between a CRNC and a Node B. However, **claims 20 and 31** do not require the second network element to manage the transport quality. The **claims 20 and 31** only require the exchanging (signaling) of parameters, but do not require the parameters to be used by the second node (i.e. Node B).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY M. RUTKOWSKI whose telephone number is (571)270-1215. The examiner can normally be reached on Monday - Friday 7:30-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey M Rutkowski/
Examiner, Art Unit 2473

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